

REMARKS

This is in response to the Office Action mailed April 8, 2003, setting a shortened statutory period for response of three (3) months. As this reply has been filed within this time period, it is timely filed. The Commissioner is hereby authorized to charge any additional fees to Deposit Account number 02-1818.

Claims 22-35 and 37-39 are currently pending in the present application. Claim 22 has been amended herein. Claims 145-178 have been added. Claim 22 has been amended to exclude dienes from the polymer blend. Applicants assert that no new matter has been added in light of the above amendments.

The Examiner has rejected all of the pending claims under 35 U.S.C. §102 (b), or alternatively under §103 (a) as being unpatentable over *Babrowicz et al.* (WO 97/36741).

A. Babrowicz et al. Does Not Anticipate or Render Obvious Claims 22-35 and 37-39

Claims 22-35 and 37-39 stand rejected under 35 U.S.C. §102 (b), or alternatively under §103 (a) as being unpatentable over Babrowicz et al. (WO 97/36741). Applicants respectfully traverse these rejections and request withdrawal of the same.

Independent claim 22 of the present invention, as amended, is directed to a monolayer film fabricated from non-diene containing polymer blend. The non-diene containing polymer blend contains a first component of a polymeric material capable of being cross-linked and is selected from the group consisting of an ethylene containing polymer, the first component is present in an amount by weight of the film from about 50% to about 95%. The blend further contains a second component which is not readily cross-linkable, and is selected from the group consisting of propylene containing polymers and methyl pentene containing polymers, the second component being present in an amount by weight of the film from about 50% to about 5%. The first and second components each have a melting point temperature determined by DSC, and a portion of the first component is cross-linked, while the second component is essentially free of cross-linking.

Babrowicz et al. discloses a polymer blend and multilayer film utilizing the polymer blend in at least one layer. The polymer blend, which is capable of being cross-linked, must contain a Polymeric Crosslink Enhancer (PCE) which is formed from monomeric units derived from a) at least one polyene monomer, b) at least one C₂-C₂₀ olefinic monomer; and optionally c)

at least one or more copolymerizable monomers other than a or b. (See, *Babrowicz et al.* at page 12, lines 13-16). The Examiner states that *Babrowicz et al.* discloses a film containing a blend of a polyolefin such as a metallocene generated ethylene/octene copolymer having a density of 0.901 g/cc, and ethylene propylene diene monomer (EPDM) as in Applicants' propylene containing polymer. (See Office Action of 4/08/03 at page 3, third paragraph).

Babrowicz et al. is particularly directed to the use of a PCE, to selectively enhance the crosslinking with respect to a certain layer or layers of a multilayer film. (See, *Babrowicz et al.* at p. 7, lines 19-27). The PCE, composed of at least one polyene monomer, at least one C₂ – C₂₀ olefin monomer and optionally a third copolymerizable monomer, when added to a film layer results in a higher degree of cross-linking than other layers. (See, *Babrowicz et al.* at p. 7, line 28 to p. 8, line 11). *Babrowicz et al.* defines a polyene as any unsaturated aliphatic or a alicyclic compound containing at least four carbon atoms in a chain and having at least two carbon-carbon double bonds. The polyenes exemplified by *Babrowicz et al.* are EPDMs, and the compounds listed on p. 12, line 19 to p. 13, line 12. Thus, the polyenes may be dienes or compounds containing more than two double bonds.

In contrast, the Applicants claim a polymer blend which does not contain a diene and is both cross-linked by irradiation, and capable of forming heat seals. A significant advantage of the present invention is that it provides an irradiated monolayer film structure which is heat sealable.

The inclusion of the limitation in claim 22 of a "non-diene containing polymer blend" does not add new matter. As demonstrated in the examples of the present invention (See, Specification at p. 17-18), several non-diene containing formulations have been developed which meet the claimed physical and performance requirements, such as heat sealing.

The proper test for determining whether a claim limitation finds support in the specification can be found in *Application of Wertheim*, where the CCPA explained that:

[t]he function of the description requirement is to ensure that the inventor had possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him; how the specification accomplishes this is not material. (citation omitted) It is not necessary that the application describe the claim limitations exactly...but only so clearly that persons of ordinary skill in the art will recognize from the disclosure that appellants invented processes including those limitations. (citations omitted)

Application of Wertheim, 541 F.2d at 262.

The CCPA held in *Wertheim* that applicants were entitled to claim priority to an early filed Swiss application. The Examiner and Board refused to allow a claim of priority because the Swiss application did not provide support for the claimed range of 35-60% solids content in a process claim for making freeze-dried coffee. Instead the Swiss application recited a solids range of from 25% to 60% with examples of a solids content of 36% and 50%. The CCPA reversed stating that there was adequate support for the more narrow range. The CCPA held that the applicants satisfied the written description stating that:

[i]n the context of this invention, in light of the description of the invention as employing solids contents within the range of 25-60% along with the specific embodiments of 36% and 50%, we are of the opinion that, as a factual matter, persons skilled in the art would consider processes employing a 35-60% solids content range to be part of appellants' invention and would be led by the Swiss disclosure so to conclude. (Citation omitted) The PTO has done nothing more than argue lack of literal support, which is not enough. If lack of literal support alone were enough to support a rejection under §112, then the statement of In re Lukach, that "the invention claimed does not have to be described in ipso verbi in order to satisfy the description requirement of §112," is empty verbiage. The burden of showing that the claimed invention is not described in the specification rests on the PTO in the first instance, and it is up to the PTO to give reasons why a description not in *ipsis verbis* is insufficient.

Application of Wertheim, 541 F.2d at 265.

The Court further states:

[t]hat what appellants claim as patentable to them is less than what they describe as their invention is not conclusive if their specification also reasonably describes that which they do claim. Inventions are constantly made which turn out not to be patentable, and applicants frequently discover during the course of prosecution that only part of what they invented and originally claimed is patentable.

Application of Wertheim, 541 F.2d at 263.

In the present case, Applicants' original claims included polymer blends that did not exclude dienes. *Babrowicz et al.* discloses a polymer blend of an EPDM with specific polyolefins including polypropylene. Thus, Applicants have amended the claims to exclude

polymer blends containing dienes. In support of these amendments, the specification describes several polymer blends suitable for carrying out the present invention which do not contain dienes. Specifically, the examples of disclose blends of: (1) ULDPE and homopolymers of propylene, and (2) ULDPE and propylene and ethylene copolymers, which are capable of forming heat seals. Thus, the disclosure supports the non-diene limitation of the claims, as the examples demonstrate that the use of a diene is not needed to produce the products of the present invention. It further shows that Applicants were in possession of this invention at the time of filing. Accordingly, this amendment does not add new matter.

Applicants respectfully assert that *Babrowicz et al.* fails to anticipate the claimed invention, as amended herein. The present invention, as amended in independent claim 22 is directed to a monolayer film fabricated from non-diene containing polymer blend.

Accordingly, Applicants respectfully request that the rejection of claims 22-35, and 37-39 on the basis of 35 U.S.C. §102(b) and § 103(a) be withdrawn.

B. Babrowicz et al. Does Not Anticipate or Render Obvious New Claims 145-178

New claims 145-161 are directed to a monolayer film fabricated from a two-component polymer blend. The claims disclose a blend *consisting essentially of* a first component of a polymeric material capable of being cross-linked and is selected from the group consisting of an ethylene containing polymer, the first component present in an amount by weight of the film from about 50% to about 95%. The blend further contains a second component which is not readily cross-linkable, and is selected from the group consisting of propylene containing polymers and methyl pentene containing polymers, the second component being present in an amount by weight of the film from about 50% to about 5%. The first and second components each have a melting point temperature determined by DSC, and a portion of the first component is cross-linked, while the second component is essentially free of cross-linking. Claims 145-161 are written to exclude components that would materially affect the blend, such as the PCEs or dienes of *Babrowicz*. For the reasons argued above, claims 145-161 are distinguished from *Babrowicz et al.*

New claims 161-178 are directed to a monolayer film fabricated from a two-component polymer blend. The claims disclose a blend *consisting of* a first component of a polymeric material capable of being cross-linked and is selected from the group consisting of an ethylene

containing polymer, the first component present in an amount by weight of the film from about 50% to about 95%. The blend further contains a second component which is not readily cross-linkable, and is selected from the group consisting of propylene containing polymers and methyl pentene containing polymers, the second component being present in an amount by weight of the film from about 50% to about 5%. The first and second components each have a melting point temperature determined by DSC, and a portion of the first component is cross-linked, while the second component is essentially free of cross-linking. For the reasons argued above, claims 161-178 are written to exclude PCEs or dienes and are thus distinguished from *Babrowicz et al.*

Therefore, Applicants assert that new claims 145-178 do not contain new matter and are distinguished over the disclosure in *Babrowicz et al.*

CONCLUSION

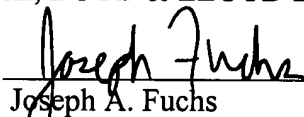
In view of the foregoing remarks, Applicants submit that all pending claims are in a condition for allowance and respectfully request a notice of the same.

Respectfully submitted,

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BY



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